IN THE CLAIMS

Please cancel claims 4, 12, and 19-22.

Please amend claims 1, 5, 11, 14, 15, 17, and 18 to read as follows:

- 1. (Amended) An allelic ladder mixture comprising one or more of the following allelic ladders:
 - i) an allelic ladder for locus HUMVWFA31/A comprising one or more alleles consisting of sequences:-

TCTA TCTG TCTA (TCTG)₄ (TCTA)₃ - SEQ ID NO 1; or

TCTA (TCTG)₄ (TCTA)₇ - SEQ ID NO 2; or

(TCTA)₂ (TCTG)₄ (TCTA)₃ TCCA (TCTA)₃ - SEQ ID NO 3;

ii) an allelic ladder for locus HUMTHO1 comprising an allele consisting of sequence:-

(TCAT)₄ CAT (TCAT)₇ TCGT TCAT - SEQ ID NO 4;

iii) an allelic ladder for locus D8S1179 comprising an allele consisting of sequence:-

(TCTA)₂ TCTG(TCTA)₁₆ - SEQ ID NO 6;

iv) an allelic ladder for locus HUMFIBRA/FGA comprising one or more alleles consisting of sequences:-

(TTTC) $_3$ TTTT TTCT (CTTT) $_5$ T (CTTT) $_3$ CTCC (TTCC) $_2$ - SEQ ID NO 7; or

(TTTC) $_3$ TTTT TTCT (CTTT) $_{13}$ CCTT (CTTT) $_5$ CTCC (TTCC) $_2$ - SEQ ID NO 8; or

(TTTC)₃ TTTT TTCT (CTTT)₁₆ CCTT (CTTT)₅ CTCC (TTCC)₂ - SEQ

ID NO 9; or

(TTTC)₄ TTTT TT (CTTT)₁₅ (CTTC)₃ (CTTT)₃ CTCC (TTCC)₄ - SEQ

ID NO 10; or

(TTTC)₄ TTTT TT (CTTT)₁₆ (CTTC)₃ (CTTT)₃ CTCC (TTCC)₄ - SEQ

ID NO 11; or

(TTTC)₄ TTTT TT (CTTT)₁₇ (CTTC)₃ (CTTT)₃ CTCC (TTCC)₄ - SEQ

ID NO 12; or

(TTTC)₄ TTTT TT (CTTT)₈ (CTGT)₄ (CTTT)₁₃ (CTTC)₄ (CTTT)₃

CTCC (TTCC)₄ - SEQ ID NO 13; or

(TTTC)₄ TTTT TT (CTTT)₈ (CTGT)₅ (CTTT)₁₃ (CTTC)₄ (CTTT)₃

CTCC (TTCC)₄ - SEQ ID NO 14; or

(TTTC)₄ TTTT TT (CTTT)₁₁ (CTGT)₃ (CTTT)₁₄ (CTTC)₃ (CTTT)₃

CTCC (TTCC)₄ - SEQ ID NO 15; or

(TTTC)₄ TTTT TT (CTTT)₁₀ (CTGT)₅ (CTTT)₁₃ (CTTC)₄ (CTTT)₃

CTCC (TTCC)₄ - SEQ ID NO 16; or

(TTTC)₄ TTTT TT (CTTT)₁₂ (CTGT)₅ (CTTT)₁₄ (CTTC)₃ (CTTT)₃

CTCC (TTCC)₄ - SEQ ID NO 17; or

 $(TTTC)_4$ TTTT TT $(CTTT)_{14}$ $(CTGT)_3$ $(CTTT)_{14}$ $(CTTC)_4$ $(CTTT)_3$

CTCC (TTCC)₄ - SEQ ID NO 18;

v) an allelic ladder for locus D21S11 comprising one or more alleles consisting of sequences:-

(TCTA)₄ (TCTG)₆ (TCTA)₃ TA(TCTA)₃ TCA (TCTA)₂ TCCATA (TCTA)₆ TCGTCT - SEQ ID NO 19; or

 $(TCTA)_5$ $(TCTG)_6$ $(TCTA)_3$ TCA $(TCTA)_2$ TCCATA $(TCTA)_9$ TCGTCT - SEQ ID NO 20 or

 $(TCTA)_5$ $(TCTG)_6$ $(TCTA)_3$ TCA $(TCTA)_2$ TCCATA $(TCTA)_{10}$ TCGTCT - SEQ ID NO 21; or

(TCTA) $_4$ (TCTG) $_6$ (TCTA) $_3$ TA (TCTA) $_3$ TCA (TCTA) $_2$ TCCATA (TCTA) $_8$ TCGTCT - SEQ ID NO 22; or

(TCTA)₅ (TCTG)₅ (TCTA)₃ TA (TCTA)₃ TCA (TCTA)₂ TCCATA (TCTA)₉ TCGTCT - SEQ ID NO 23; or

 $(TCTA)_4$ $(TCTG)_6$ $(TCTA)_3$ TA $(TCTA)_3$ TCA $(TCTA)_2$ TCCATA $(TCTA)_{10}$ TCGTCT - SEQ ID NO 24; or

(TCTA) $_4$ (TCTG) $_6$ (TCTA) $_3$ TA (TCTA) $_3$ TCA (TCTA) $_2$ TCCATA (TCTA) $_{11}$ TCGTCT - SEQ ID NO 25; or

(TCTA)₆ (TCTG)₅ (TCTA)₃ TA (TCTA)₃ TCA (TCTA)₂ TCCATA (TCTA)₁₁ TCGTCT - SEQ ID NO 26; or

(TCTA)₅ (TCTG)₆ (TCTA)₃ TA (TCTA)₃ TCA (TCTA)₂ TCCATA (TCTA)₁₂ TCGTCT - SEQ ID NO 27; or

(TCTA)₅ (TCTG)₆ (TCTA)₃ TA (TCTA)₃ TCA (TCTA)₂ TCCATA (TCTA)₁₁ TA TCTA TCGTCT - SEQ ID NO 28; or

 $(TCTA)_5$ $(TCTG)_6$ $(TCTA)_3$ TA $(TCTA)_3$ TCA $(TCTA)_2$ TCCATA $(TCTA)_{12}$ TA TCTA TCGTCT - SEQ ID NO 29; or

(TCTA)₅ (TCTG)₆ (TCTA)₃ TA (TCTA)₃ TCA (TCTA)₂ TCCATA (TCTA)₁₃ TA TCTA TCGTCT - SEQ ID NO 30; or

(TCTA)₅ (TCTG)₆ (TCTA)₃ TA (TCTA)₃ TCA (TCTA)₂ TCCATA (TCTA)₁₄ TATCTA TCGTCT - SEQ ID NO 31; or

 $(TCTA)_{10}$ $(TCTG)_5$ $(TCTA)_3$ TA $(TCTA)_3$ TCA $(TCTA)_2$ TCCATA $(TCTA)_{12}$ TCGTCT - SEQ ID NO 32; or

(TCTA)₁₁ (TCTG)₅ (TCTA)₃ TA (TCTA)₃ TCA (TCTA)₂ TCCATA (TCTA)₁₂ TCGTCT - SEQ ID NO 33; or

 $(TCTA)_{11}$ $(TCTG)_5$ $(TCTA)_3$ TA $(TCTA)_3$ TCA $(TCTA)_2$ TCCATA $(TCTA)_{13}$ TCGTCT - SEQ ID NO 34; or

 $(TCTA)_{13}$ $(TCTG)_5$ $(TCTA)_3$ TA $(TCTA)_3$ TCA $(TCTA)_2$ TCCATA $(TCTA)_{12}$ TCGTCT - SEQ ID NO 35;

vi) an allelic ladder for locus D18S51 comprising an allele consisting of sequence:-

 $(AGAA)_8$ - SEQ ID NO 36.

5. (Amended) An allelic ladder mixture according to claim 1 in which the allelic ladders in the mixture each include at least 7 alleles.

11. (Amended) An allelic ladder mixture comprising an allelic ladder for one or more of the following loci, with lowest molecular weight allele and uppermost molecular weight allele designation as follows:-

	Locus	Low MW allele Designation	High MW allele Designation
a)	HUMVWFA31/A	10	21
b)	HUMTH01	4	13.3
c)	D8S1179	7	19
d)	HUMFIBRA/FGA	16.1	50.2
e)	D21S11	53	81
f)	D18S51	8	27

- 14. (Amended) A method of analysing one or more samples comprising :
 - a) obtaining genomic DNA from the sample;
 - b) amplifying the DNA;
- c) obtaining an indication of one or more of the constituent parts of the sample; and comparing the indications with an allelic ladder mixture comprising one or more of the following allelic ladders:
 - i) an allelic ladder for locus HUMVWFA31/A comprising one or more alleles consisting of sequences:-

TCTA TCTG TCTA (TCTG)₄ (TCTA)₃ - SEQ ID NO 1; or

TCTA (TCTG)₄ (TCTA)₇ - SEQ ID NO 2; or

(TCTA)₂ (TCTG)₄ (TCTA)₃ TCCA (TCTA)₃ - SEQ ID NO 3

ii) an allelic ladder for locus HUMTHO1 comprising an allele consisting of sequence:-

(TCAT)₄ CAT (TCAT)₇ TCGT TCAT - SEQ ID NO 4;

iii) an allelic ladder for locus D8S1179 comprising an allele consisting of sequence:-

(TCTA)₂ TCTG (TCTA)₁₆ - SEQ ID NO 6;

iv) an allelic ladder for locus HUMFIBRA/FGA comprising one or more alleles consisting of the sequences:-

(TTTC)₃ TTTT TTCT (CTTT)₅ T (CTTT)₃ CTCC (TTCC)₂ - SEQ ID NO 7; or

 $(TTTC)_3 TTTT TTCT (CTTT)_{13} CCTT (CTTT)_5 CTCC (TTCC)_2 - SEQ$

ID NO 8; or

ID NO 11; or

(TTTC)₃ TTTT TTCT (CTTT)₁₆ CCTT (CTTT)₅ CTCC (TTCC)₂ - SEQ ID NO 9; or

(TTTC) $_4$ TTTT TT (CTTT) $_{15}$ (CTTC) $_3$ (CTTT) $_3$ CTCC (TTCC) $_4$ - SEQ ID NO 10; or

(TTTC)₄ TTTT TT (CTTT)₁₆ (CTTC)₃ (CTTT)₃ CTCC (TTCC)₄ - SEQ

(TTTC)₄ TTTT TT (CTTT)₁₇ (CTTC)₃ (CTTT)₃ CTCC (TTCC)₄ - SEQ

ID NO 12; or

(TTTC)₄ TTTT TT (CTTT)₈ (CTGT)₄ (CTTT)₁₃ (CTTC)₄ (CTTT)₃ CTCC (TTCC)₄ - SEQ ID NO 13; or

(TTTC)₄ TTTT TT (CTTT)₈ (CTGT)₅ (CTTT)₁₃ (CTTC)₄ (CTTT)₃

CTCC (TTCC) $_4$ - SEQ ID NO 14; or

(TTTC) $_4$ TTTT TT (CTTT) $_{11}$ (CTGT) $_3$ (CTTT) $_{14}$ (CTTC) $_3$ (CTTT) $_3$

CTCC (TTCC)₄ - SEQ ID NO 15; or

 $(TTTC)_4$ TTTT TT $(CTTT)_{10}$ $(CTGT)_5$ $(CTTT)_{13}$ $(CTTC)_4$ $(CTTT)_3$

CTCC (TTCC)₄ - SEQ ID NO 16; or

(TTTC)₄ TTTT TT (CTTT)₁₂ (CTGT)₅ (CTTT)₁₄ (CTTC)₃ (CTTT)₃

CTCC (TTCC)₄ - SEQ ID NO 17; or

 $(TTTC)_4$ TTTT TT $(CTTT)_{14}$ $(CTGT)_3$ $(CTTT)_{14}$ $(CTTC)_4$ $(CTTT)_3$

CTCC (TTCC)₄ - SEQ ID NO 18;

v) an allelic ladder for locus D21S11 comprising one or more alleles consisting of sequences:-

(TCTA)₄ (TCTG)₆ (TCTA)₃ TA(TCTA)₃ TCA (TCTA)₂ TCCATA (TCTA)₆ TCGTCT - SEQ ID NO 19; or

(TCTA)₅ (TCTG)₆ (TCTA)₃ TCA (TCTA)₂ TCCATA (TCTA)₉
TCGTCT - SEQ ID NO 20; or

 $(TCTA)_5$ $(TCTG)_6$ $(TCTA)_3$ TCA $(TCTA)_2$ TCCATA $(TCTA)_{10}$ TCGTCT - SEQ ID NO 21; or

(TCTA)₄ (TCTG)₆ (TCTA)₃ TA (TCTA)₃ TCA (TCTA)₂ TCCATA (TCTA)₈ TCGTCT - SEQ ID NO 22; or

 $(TCTA)_5 (TCTG)_5 (TCTA)_3 TA (TCTA)_3 TCA (TCTA)_2 TCCATA$ $(TCTA)_9 TCGTCT - SEQ ID NO 23; or$

(TCTA)₄ (TCTG)₆ (TCTA)₃ TA (TCTA)₃ TCA (TCTA)₂ TCCATA

 $(TCTA)_{10}$ TCGTCT - SEQ ID NO 24; or

(TCTA)₄ (TCTG)₆ (TCTA)₃ TA (TCTA)₃ TCA (TCTA)₂ TCCATA (TCTA)₁₁ TCGTCT - SEQ ID NO 25; or

 $(TCTA)_6$ $(TCTG)_5$ $(TCTA)_3$ TA $(TCTA)_3$ TCA $(TCTA)_2$ TCCATA $(TCTA)_{11}$ TCGTCT - SEQ ID NO 26; or

(TCTA) $_5$ (TCTG) $_6$ (TCTA) $_3$ TA (TCTA) $_3$ TCA (TCTA) $_2$ TCCATA (TCTA) $_{12}$ TCGTCT - SEQ ID NO 27; or

(TCTA)₅ (TCTG)₆ (TCTA)₃ TA (TCTA)₃ TCA (TCTA)₂ TCCATA (TCTA)₁₁ TA TCTA TCGTCT - SEQ ID NO 28; or

(TCTA)₅ (TCTG)₆ (TCTA)₃ TA (TCTA)₃ TCA (TCTA)₂ TCCATA (TCTA)₁₂ TA TCTA TCGTCT - SEQ ID NO 29; or

 $(TCTA)_5$ $(TCTG)_6$ $(TCTA)_3$ TA $(TCTA)_3$ TCA $(TCTA)_2$ TCCATA $(TCTA)_{13}$ TA TCTA TCGTCT - SEQ ID NO 30; or

(TCTA)₅ (TCTG)₆ (TCTA)₃ TA (TCTA)₃ TCA (TCTA)₂ TCCATA (TCTA)₁₄ TATCTA TCGTCT - SEQ ID NO 31; or

 $(TCTA)_{10} (TCTG)_5 (TCTA)_3 TA (TCTA)_3 TCA (TCTA)_2 TCCATA$ $(TCTA)_{12} TCGTCT - SEQ ID NO 32; or$

 $(TCTA)_{11} (TCTG)_5 (TCTA)_3 TA (TCTA)_3 TCA (TCTA)_2 TCCATA$ $(TCTA)_{12} TCGTCT - SEQ ID NO 33; or$

 $(TCTA)_{11} (TCTG)_5 (TCTA)_3 TA (TCTA)_3 TCA (TCTA)_2 TCCATA$ $(TCTA)_{13} TCGTCT - SEQ ID NO 34; or$

(TCTA)₁₃ (TCTG)₅ (TCTA)₃ TA (TCTA)₃ TCA (TCTA)₂ TCCATA (TCTA)₁₂ TCGTCT - SEQ ID NO 35;

vi) an allelic ladder for locus D18S51 comprising an allele consisting of sequence:-

 $(AGAA)_8$ - SEQ ID NO 36.

- 15. (Amended) A method according to claim 14 in which the DNA sample is one or more of a sample taken from the scene of a crime, a sample associated with the scene of a crime, a sample obtained from a suspect, a sample obtained from a human under consideration or a reference sample.
 - 17. (Amended) One or more isolated alleles comprising or consisting of sequences

TCTA TCTG TCTA (TCTG)₄ (TCTA)₃ - SEQ ID NO 1;

TCTA (TCTG)₄ (TCTA)₇ - SEQ ID NO 2;

(TCTA)₂ (TCTG)₄ (TCTA)₃ TCCA (TCTA)₃ - SEQ ID NO 3;

(TCAT)₄ CAT (TCAT)₇ TCGT TCAT - SEQ ID NO 4;

(TCTA)₂ TCTG (TCTA)₁₆ - SEQ ID NO 6;

(TTTC)₃ TTTT TTCT (CTTT)₅ T (CTTT)₃ CTCC (TTCC)₂ - SEQ ID NO 7;

(TTTC)₃ TTTT TTCT (CTTT)₁₃ CCTT (CTTT)₅ CTCC (TTCC)₂ - SEQ ID NO 8;

(TTTC)₃ TTTT TTCT (CTTT)₁₆ CCTT (CTTT)₅ CTCC (TTCC)₂ - SEQ ID NO 9;

(TTTC)₄ TTTT TT (CTTT)₁₅ (CTTC)₃ (CTTT)₃ CTCC (TTCC)₄ - SEQ ID NO 10;

(TTTC)₄ TTTT TT (CTTT)₁₆ (CTTC)₃ (CTTT)₃ CTCC (TTCC)₄ - SEQ ID NO 11;

(TTTC)₄ TTTT TT (CTTT)₁₇ (CTTC)₃ (CTTT)₃ CTCC (TTCC)₄ - SEQ ID NO 12;

(TTTC)₄ TTTT TT (CTTT)₈ (CTGT)₄ (CTTT)₁₃ (CTTC)₄ (CTTT)₃ CTCC (TTCC)₄ - SEQ ID NO 13;

(TTTC)₄ TTTT TT (CTTT)₈ (CTGT)₅ (CTTT)₁₃ (CTTC)₄ (CTTT)₃ CTCC (TTCC)₄ - SEQ ID NO 14;

(TTTC)₄ TTTT TT (CTTT)₁₁ (CTGT)₃ (CTTT)₁₄ (CTTC)₃ (CTTT)₃ CTCC (TTCC)₄ - SEQ ID NO 15;

(TTTC)₄ TTTT TT (CTTT)₁₀ (CTGT)₅ (CTTT)₁₃ (CTTC)₄ (CTTT)₃ CTCC (TTCC)₄ - SEQ ID NO 16;

 $(TTTC)_4$ TTTT TT $(CTTT)_{12}$ $(CTGT)_5$ $(CTTT)_{14}$ $(CTTC)_3$ $(CTTT)_3$ CTCC $(TTCC)_4$ - SEQ ID NO 17;

(TTTC)₄ TTTT TT (CTTT)₁₄ (CTGT)₃ (CTTT)₁₄ (CTTC)₄ (CTTT)₃ CTCC (TTCC)₄ - SEQ ID NO 18;

(TCTA)₄ (TCTG)₆ (TCTA)₃ TA(TCTA)₃ TCA (TCTA)₂ TCCATA (TCTA)₆
TCGTCT - SEQ ID NO 19;

(TCTA)₅ (TCTG)₆ (TCTA)₃ TCA (TCTA)₂ TCCATA (TCTA)₉ TCGTCT - SEQ ID NO 20;

(TCTA)₅ (TCTG)₆ (TCTA)₃ TCA (TCTA)₂ TCCATA (TCTA)₁₀ TCGTCT - SEQ ID NO 21;

(TCTA) $_4$ (TCTG) $_6$ (TCTA) $_3$ TA (TCTA) $_3$ TCA (TCTA) $_2$ TCCATA (TCTA) $_8$ TCGTCT - SEQ ID NO 22;

(TCTA)₅ (TCTG)₅ (TCTA)₃ TA (TCTA)₃ TCA (TCTA)₂ TCCATA (TCTA)₉
TCGTCT - SEQ ID NO 23;

(TCTA) $_4$ (TCTG) $_6$ (TCTA) $_3$ TA (TCTA) $_3$ TCA (TCTA) $_2$ TCCATA (TCTA) $_{10}$ TCGTCT - SEQ ID NO 24;

 $(TCTA)_4 (TCTG)_6 (TCTA)_3 TA (TCTA)_3 TCA (TCTA)_2 TCCATA (TCTA)_{11}$ TCGTCT - SEQ ID NO 25;

(TCTA)₆ (TCTG)₅ (TCTA)₃ TA (TCTA)₃ TCA (TCTA)₂ TCCATA (TCTA)₁₁
TCGTCT - SEQ ID NO 26;

(TCTA) $_5$ (TCTG) $_6$ (TCTA) $_3$ TA (TCTA) $_3$ TCA (TCTA) $_2$ TCCATA (TCTA) $_{12}$ TCGTCT - SEQ ID NO 27;

(TCTA)₅ (TCTG)₆ (TCTA)₃ TA (TCTA)₃ TCA (TCTA)₂ TCCATA (TCTA)₁₁ TA
TCTA TCGTCT - SEQ ID NO 28;

(TCTA)₅ (TCTG)₆ (TCTA)₃ TA (TCTA)₃ TCA (TCTA)₂ TCCATA (TCTA)₁₂ TA
TCTA TCGTCT - SEQ ID NO 29;

(TCTA)₅ (TCTG)₆ (TCTA)₃ TA (TCTA)₃ TCA (TCTA)₂ TCCATA (TCTA)₁₃ TA
TCTA TCGTCT - SEQ ID NO 30;

 $(TCTA)_5$ $(TCTG)_6$ $(TCTA)_3$ TA $(TCTA)_3$ TCA $(TCTA)_2$ TCCATA $(TCTA)_{14}$ TATCTA TCGTCT - SEQ ID NO 31;

 $(TCTA)_{10} (TCTG)_5 (TCTA)_3 TA (TCTA)_3 TCA (TCTA)_2 TCCATA (TCTA)_{12}$ TCGTCT - SEQ ID NO 32;

(TCTA)₁₁ (TCTG)₅ (TCTA)₃ TA (TCTA)₃ TCA (TCTA)₂ TCCATA (TCTA)₁₂
TCGTCT - SEQ ID NO 33;

(TCTA)₁₁ (TCTG)₅ (TCTA)₃ TA (TCTA)₃ TCA (TCTA)₂ TCCATA (TCTA)₁₃ TCGTCT - SEQ ID NO 34;

(TCTA) $_{13}$ (TCTG) $_5$ (TCTA) $_3$ TA (TCTA) $_3$ TCA (TCTA) $_2$ TCCATA (TCTA) $_{12}$ TCGTCT - SEQ ID NO 35; or (AGAA) $_8$ - SEQ ID NO 36.

18. (Amended) One or more alleles according to claim 17 in which the alleles are provided purified from alleles other than those of HUMVWFA31/A, HUMTH01, D8S1179, HUMFIBRA/FGA, D21511, D18551 or AMG loci.